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J. T. HELM

2,148,944

FISH-SCALING TOOL

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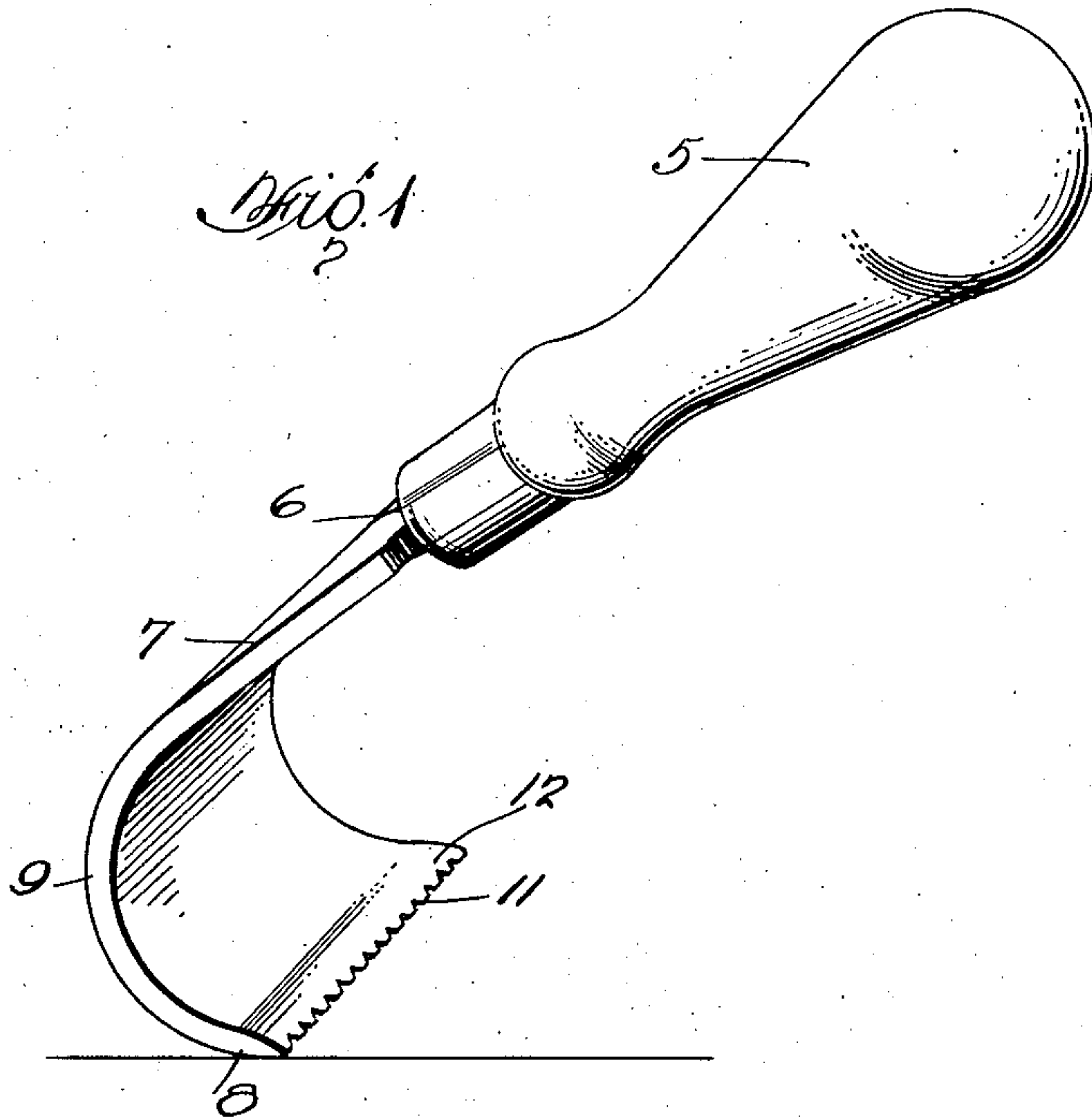


Fig. 2

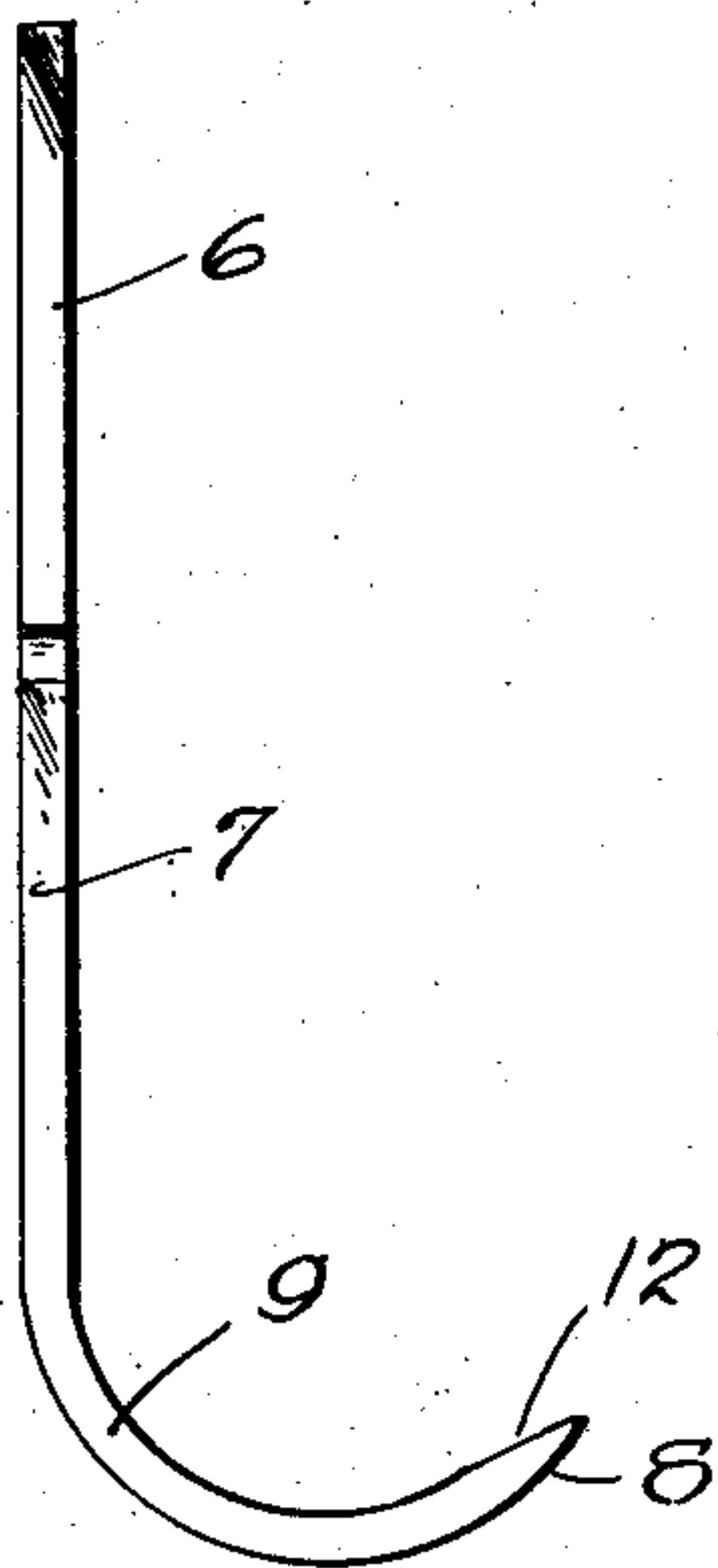


Fig. 3

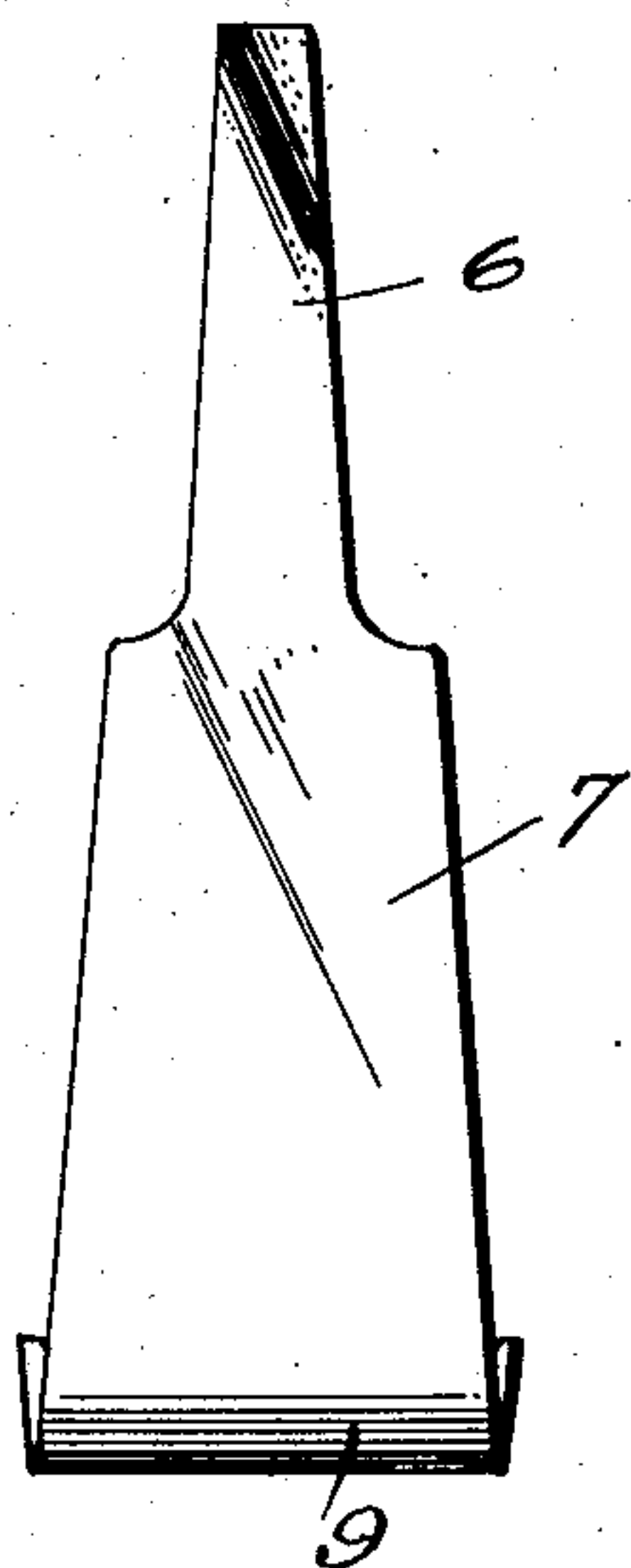


Fig. 4

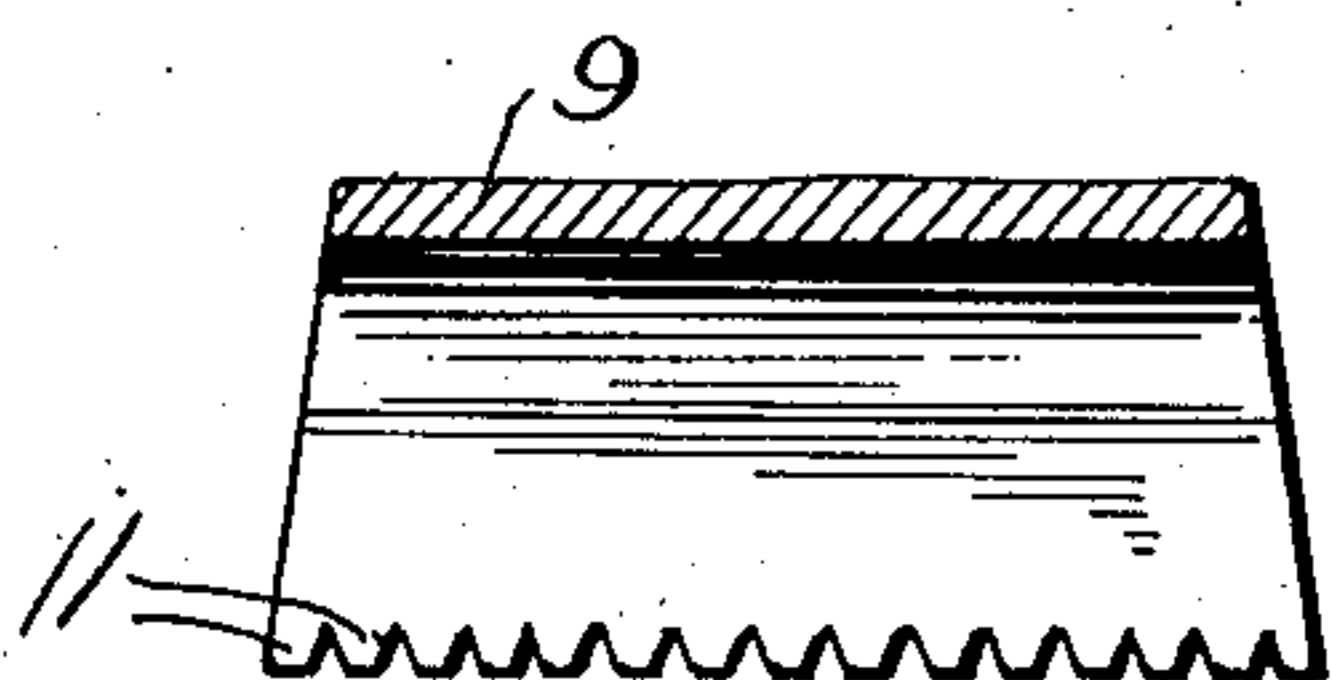
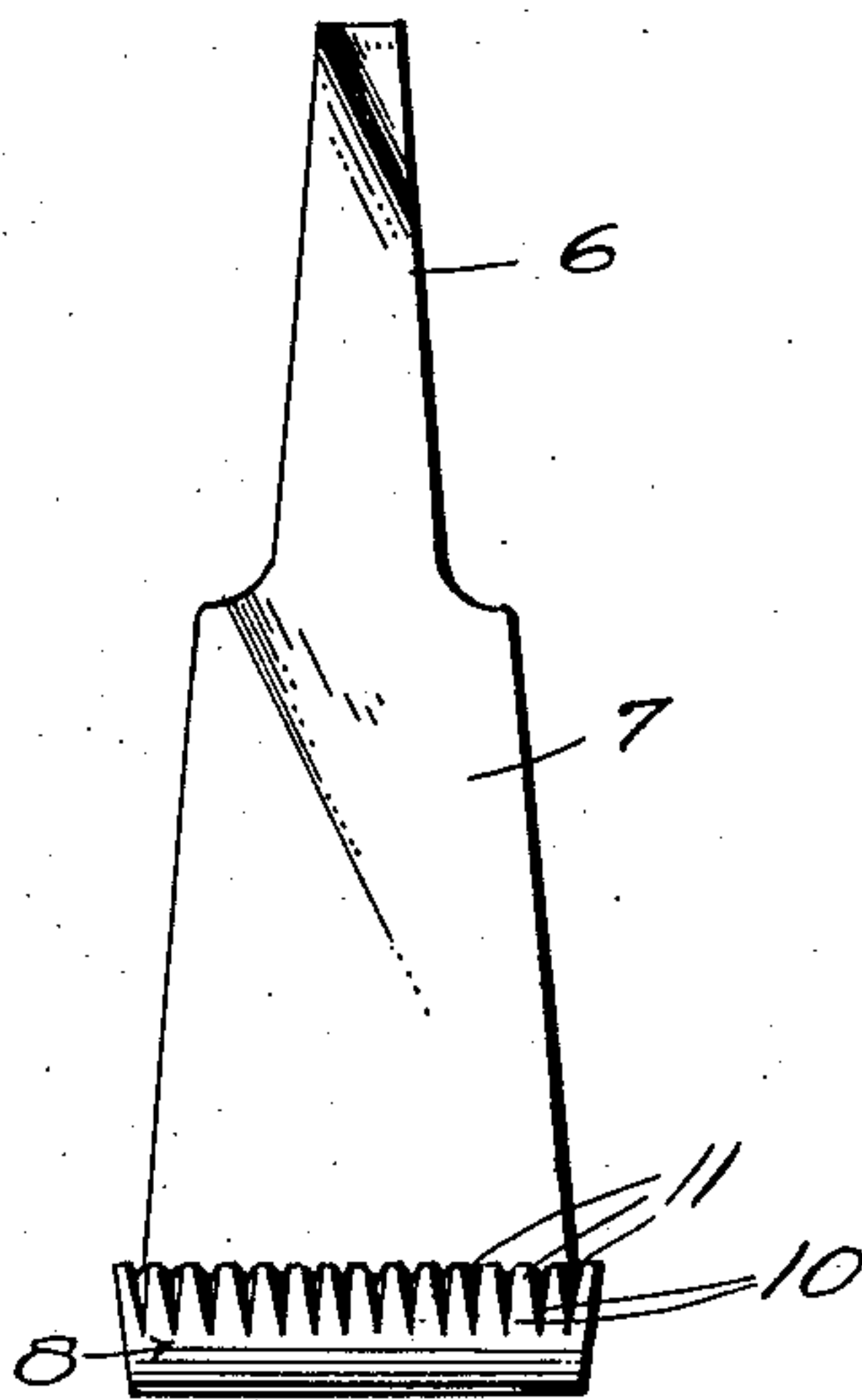


Fig. 5

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FISH-SCALING TOOL

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3 Claims. (Cl. 17-7)

My invention relates to improvements in scaling devices for fish, and more particularly to a hand tool having a handle and a relatively rigid blade which is curved downwardly and inwardly toward its outer scraping edge, the portions of the tool being so proportioned and arranged as to eliminate the usual disadvantages in use of scaling devices of this general character.

An object of my invention is to provide a relatively rigid blade with a rigidly attached handle, the blade being flat transversely of its length and increasing in width from the handle to the outer scraping edge of the blade.

A further object of my invention is to provide such a blade, which is widely curved in the direction of its length through an arc of approximately 140° and terminates in a scraping edge portion which is directed inwardly beneath the body of the tool at a tangent to the adjacent curved portion of the blade.

A still further object of my invention is to provide a scraping blade of this character with a rigid tapering outer edge portion having a row of flat edge teeth formed by cutting or grooving the outer face of the blade adjacent the outer edge so that the grooves cut the edge of the blade at intervals to provide a series of relatively short, broad edge teeth which occupy the same general plane.

Another object of my invention is to provide a scraping blade for a tool of this character with a continuous, unbroken and relatively wide inner surface which extends forwardly from the row of flat edge teeth and upwardly in an arcuate path to the horizontal rearwardly extending body portion of the blade which overlies the scraping edge in use, and is rigidly connected to the forward end of the handle, whereby the scraping edge is rigidly supported in proper angular relation to the surface being scraped with a relatively wide scale receiving and deflecting surface curving forwardly and upwardly therefrom.

Other objects of my invention reside in the novel combination and arrangement of parts and in the details of construction thereof which facilitate the removal of scales from the body of a fish without causing them to fly about, all as will be hereinafter more fully described and claimed and illustrated in the accompanying drawing, wherein:

Fig. 1 is a perspective view of the hand tool embodying my invention and illustrating the manner in which the scraping edge and inner arcuate scale receiving surface of the blade are

rigidly supported by the handle in the act of removing scales from the body of a fish;

Fig. 2 is a longitudinal edge view of the blade, removed from the handle, and illustrating the degree of curvature of scale-receiving portion of the blade;

Fig. 3 is a rear plan view of the blade shown in Fig. 2, showing the flaring construction of the blade;

Fig. 4 is a front plan view of the blade illustrating the formation of teeth in the outer tangential edge portion of the blade; and

Fig. 5 is an enlarged fragmental view, taken from the inner side of the blade and showing the serrated scraping edge produced by the grooved construction of the reversed side (illustrated in Fig. 4), and the forwardly and upwardly curving scale-receiving surface of the blade which adjoins the tapering edge portion.

In scaling tools as heretofore constructed, the scraping edge or teeth have been more or less flexible or flexibly supported by a body portion to extend at substantially right angles to the surface of the fish being scaled. The scraping edge of such tools is thus caused to flex on engagement with the ends of successive scales causing the scales to likewise flex and fly about as they are loosened by movement of the tool across the body of the fish. Further, the flesh of the fish is often torn and roughened through such uncontrolled action of the scraping edge, all to the annoyance and inconvenience of the operator.

In Fig. 1 of the drawing I have illustrated my improved scaling tool as provided with an elongated handle 5, in the forward end of which is secured the tapered shank 6 of the scraping blade 7. The blade 7 and its shank are preferably formed of steel and may be of uniform thickness through its length and breadth, as shown, it being only important in this respect that the blade and shank be substantially rigid from end to end. Forwardly of the shank 6, the relatively wider body of the blade 7 gradually increases in width as it approaches the outer scraping edge portion 8, as is illustrated in Figs. 3 and 4, and adjacent this outer edge portion the body portion 9 of the blade is curved forwardly and upwardly through an arc of approximately 140° to direct the outer tangential edge portion 8 slightly rearwardly of the tool. By reference now to Figs. 4 and 5 it will be noted that the outer face of the tangential edge portion 8 is longitudinally grooved or cut at spaced points 10 to form a transverse series of substantially flat edge teeth 11 at the scraping edge of the blade, and that

the inner face 12 of the tangential edge portion is ground off toward the outer edge of the blade to provide a relatively sharp scraping edge for the teeth which merges into the forwardly and upwardly inner surface 9 of the blade body. It will be further noted that the parallel cuts or grooves 10 are substantially V-shaped in cross section and increase in width and depth toward the tapering edge of the blade where they cut through the blade edge to provide relatively short flat-ended teeth, the corners of which are preferably not sharp i. e. slightly rounded, as shown in Figs. 4 and 5. A broad, effectively guarded scraping edge is thus provided which may be readily moved back and forth over the body of the fish in the most efficient manner, by the handle 5, to effect removal of the scales without danger of cutting into or tearing the skin of the fish or causing the scales to fly about.

Although I have shown and described a preferred construction for accomplishing the objects and advantages heretofore enumerated, it will be understood that various modifications may be made therein without departing from the spirit of my invention as defined in the following claims.

What I claim as new and desire to protect by Letters Patent is:

1. A fish scaler comprising a handle having a blade rigidly connected thereto to extend outwardly from one end thereof, the sides of the blade converging toward the handle and the outer end portion of the blade being curved through an arc of more than 90° to an outer tapered edge

portion which extends transversely of the blade at a tangent to the curved portion thereof, and the outer face of said tapered edge portion being provided with spaced longitudinally extending grooves which cut the outer edge of the blade to provide a transverse series of relatively short teeth.

2. A fish scaler comprising a handle having a blade rigidly connected thereto to extend outwardly from one end thereof, the sides of the blade converging toward the handle and the outer end portion of the blade being curved through an arc of more than 90° to an outer tapered edge portion which extends transversely of the blade at a tangent to the curved portion thereof, and the outer face of said tapered edge portion being provided with spaced longitudinally extending grooves, said grooves being substantially V-shaped in cross section and increasing in width and depth to the edge of the blade where they cut said edge to provide a transverse series of relatively short flat-ended teeth.

3. In a fish scaler, a rigid blade having a widely curved body portion which terminates in a transversely extending outer end portion, and the inner surface of said end portion tapering to the outer edge of the blade to provide a relatively rigid scraping edge, and the outer surface of said end portion being formed with a transverse series of longitudinally extending grooves which cut the scraping edge of the blade at spaced points to provide relatively short flat-ended teeth.

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